



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PH#9

In re Application for:  
Roberts et al.

Examiner: Amy M. Decloux

RECEIVED

NOV 08 2002

Serial No.: 09/843,342

Group Art Unit: 1644

TECH CENTER 1600/2900

Filing Date: April 25, 2001

For: **IN VIVO LOADING OF MHC**

Commissioner for Patents  
Washington, D.C. 20231

**Certificate of First-Class Mailing (37 C.F.R. § 1.8(a))**

I hereby certify that this paper and all enclosures are being deposited with the United States Postal Service as first class mail on the date indicated below in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231

Dated: 11-4-02

Name of Person Certifying: Taryn Antalek

Printed Name: Taryn Antalek

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. § 1.56, the references listed on the attached Form PTO-1449 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application.

**I. Timing of the Information Disclosure Statement:**

This Information Disclosure Statement is filed:

- ☐ With the new patent application submitted herewith (37 C.F.R. § 1.97(a)).
- ☐ Within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 C.F.R. § 1.491.
- ☐ Before the mailing date of a first Office Action on the merits. In the event, however, that an Office Action has crossed in the mail with this Information Disclosure Statement, the Commissioner is hereby authorized to charge Deposit Account No. 07-1074 for any fees required pursuant to 37 C.F.R. § § 1.17(p) or 1.17(i)(1).

This Information Disclosure Statement is filed:

11/08/2002 BNGUYEN1 00000011 071074 09843342

01 FC:1806

180.00 CH

- ☒ After the first Office Action and more than three months after the application's filing date; or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final rejection or a notice of allowance, whichever comes first, and the Commissioner is hereby authorized to charge Deposit Account No. 07-1074 for the fee (\$180.00) set forth in 37 C.F.R. § 1.17(p) and any additional required fees.

This Information Disclosure Statement is filed:

- ☐ After the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and is accompanied by the fee (\$180.00) set forth in 37 C.F.R. § 1.17(i)(1) and a certification as specified in 37 C.F.R. § 1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the Information Disclosure Statement.

The undersigned certifies that:

- ☐ Each item of information contained in the Information Disclosure Statement was first cited in any communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56 more than three months prior to the filing of this Information Disclosure Statement.

## II. Copies of the Cited Items:

- ☒ Copies of all of the items listed on the attached Form PTO-1449 are enclosed.
- ☐ Copies of only the following items listed on the attached Form PTO-1449 are enclosed: \_\_\_\_\_.
- ☐ Copies of those items which are marked with an asterisk (\*) in the attached Form PTO-1449 are not supplied because they were previously cited by or submitted to the Patent Office in a prior Application No. \_\_\_\_\_ filed \_\_\_\_\_ and relied upon in this application for an earlier filing date under 35 U.S.C. § 120. See 37 C.F.R. § 1.98(d).

- ☐ Copies of those items which are marked with an asterisk (\*\*) in the attached Form PTO-1449 were cited in a foreign examination report in a related case. A copy of the search report and the cited references not already of record in this application are attached hereto.

### III. Concise Explanation of Relevance:

Citation of the above documents shall not be construed as:

1. an admission that the documents are necessarily prior art with respect to the instant invention;
2. a representation that a search has been made, other than as described above; or
3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached form PTO 1449 with initials or other appropriate marks.

The Commissioner is hereby authorized to charge Deposit Account No. **07-1074** for any additional fees required in connection with the filing of this Information Disclosure Statement.

Respectfully submitted,

DATE: November 4, 2002

By: Elizabeth Lassen  
Elizabeth Lassen  
Registration No. 31,845

Genzyme Corporation  
15 Pleasant Street Connector  
P.O. Box 9322  
Framingham, Massachusetts 01701-9322  
Telephone: (508) 270-2553  
Facsimile: (508) 872-5415



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	09/843,342
Filing Date	April 25, 2001
First Named Inventor	Roberts, Bruce L.
Group Art Unit	1644
Examiner Name	Amy M. Decloux
Attorney Docket Number	GA0211US

RECEIVED

NOV 08 2002

TECH CENTER 1600/2900

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	US-5,314,813			
	2	US-			
	3	US-			
	4	US-			
	5	US-			
	6	US-			
	7	US-			
	8	US-			
	9	US-			
	10	US-			
	11	US-			
	12	US-			
	13	US-			
	14	US-			
	15	US-			
	16	US-			
	17	US-			
	18	US-			
	19	US-			
	20	US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	21	WO 99/47169	09-23-99	Genzyme Corp.		
	22	WO 99/44423	09-10-99	UAB Research Foundation		
	23					
	24					
	25					
	26					
	27					
	28					
	29					

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 3

**Complete if Known**

Application Number	09/843,342
Filing Date	April 25, 2001
First Named Inventor	ROBERTS, Bruce L.
Group Art Unit	1644
Examiner Name	Amy M. Decloux
Attorney Docket Number	GA0211US

**RECEIVED**

NOV 08 2002

**TECH CENTER 1600/2900****OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

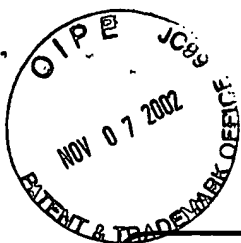
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	30	OSTRAND-ROSENBERG, S. et al., "Tumor-Specific Immunity Can Be Enhanced by Transfection Of Tumor Cells With Syngeneic MHC-CLASS-II GENES OR ALLOGENEIC MHC-CLASS-I GENES", International Journal of Cancer, 1991, Supp. 6:61-68	
	31	NICULESCU-DUVAZ, I. et al., "Gene-Directed Enzyme Prodrug Therapy", March 1998, 9(1):4-22	
	32	CHEN, SHU-HSIA et al., "Combination gene therapy for liver metastasis of colon carcinoma in vivo", Proceedings of the National Academy of Sciences of USA, National Academy of Science, 92(7):2577-2581	
	33	VILE, R.G. et al., "Systemic Gene Therapy of Murine Melanoma Using Tissue Specific Expression of the HSVtk Gene Involves an Immune Component", Cancer Research, December 1994, 54(23):6228-6234	
	34	LINDAUER, M. et al., "Gene transfer of costimulatory molecules into a human colorectal cancer cell line: requirement of CD54, CD80 and class II MHC expression for enhanced immunogenicity", Immunology, March 1998, 93(3):390-397	
	35	YAMAMOTO, S. et al., "Herpes simplex virus thymidine kinase/ganciclovir-mediated killing of tumor cells induces tumor-specific cytotoxic T cells in mice", Cancer Gene Therapy, 1997, 4(2):91-96	
	36	IWADATE, Y. et al., "Induction of Acquired Immunity in Rats That Have Eliminated Intracranial Gliosarcoma Cells by the Expression of Herpes simplex Virus-Thymidine Kinase Gene and Ganciclovir Administration", Oncology, 1997, 54(4):329-334	
	37	SRIVASTAVA and UDONO, "Heat shock protein-peptide complexes in cancer immunotherapy", Current Opinion in Immunology, 1994, 6:728-732	
	38	SUTO AND SRIVASTAVA, "A Mechanism for the Specific Immunogenicity of Heat Shock Protein-Chaperoned Peptides", Science, September 1995, 269:1585-1588	
	39	TAMURA, Y. et al., "Immunotherapy of Tumors with Autologous Tumor-Derived Heat Shock Protein Preparations", October 1997, 278:117-119	
	40	KATZ, B.Z. et al., "Green Fluorescent Protein Labeling of Cytoskeletal Structures - Novel Targeting Approach Based on Leucine Zippers", BioTechniques, August 1998, 25(2):298-303	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 3

**Complete if Known**

Application Number	09/843,342
Filing Date	April 25, 2001
First Named Inventor	ROBERTS, Bruce L.
Group Art Unit	1644
Examiner Name	Amy M. Decloux
Attorney Docket Number	GA0211US

RECEIVED

NOV 08 2002

TECH CENTER 1600/2900

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	41	SRIVASTAVA, P.K., "Peptide-Binding Heat Shock Proteins in the Endoplasmic Reticulum: Role in Immune Response to Cancer and in Antigen Presentation", Advances in Cancer Research, 1993, 62:153-177	
	42		
	43		
	44		
	45		
	46		
	47		
	48		
	49		
	50		
	51		

Examiner  
SignatureDate  
Considered

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.